

**AMENDMENTS TO THE SPECIFICATION**

***In the sequence listing:***

Please replace the Sequence Listing of record with the attached revised substitute Sequence Listing.

***In the specification:***

**Please replace the paragraph on page 18, lines 3-4, of the specification of record with the following revised paragraph, marked-up to show changes made.**

FIG. 1 shows a nucleotide sequence of ovine IP-10 and an amino acid sequence deduced from thereof [SEQ ID NO:1].

**Please replace the paragraph on page 18, lines 5-11, of the specification of record with the following revised paragraph, marked-up to show changes made.**

FIG. 2 illustrates the comparison of IP-10 amino acid sequences of ovine [SEQ ID NO:2], goat [SEQ ID NO:27], human [SEQ ID NO:28], and mouse [SEQ ID NO:29]. Four cysteine residues are conserved in these animals, but a glutamine-leucine-arginine (ELR) motif preceding the two cysteine residues from the N-terminal is not present. The homology of ovine IP-10 to human IP-10 is a higher than that of mouse IP-10. (see Table 1).

**Please replace the table on page 69, lines 19-40, of the specification of record with the following revised table, marked-up to show changes made.**

Table I

Name		Sequence		Length (bp)
oIP-10	Forward	5'-CACTCCTCAACTCTTCAGGC-3'	<u>SEQ ID NO:3</u>	262
	Reverse	5'-CCATTCCCTTTCATTGTGGC-3'	<u>SEQ ID NO:4</u>	
oCXCR3	Forward	5'-GCATCAGCTTCGATCGGTAC-3'	<u>SEQ ID NO:5</u>	283
	Reverse	5'-GATGCGGGCGTAGCAATAGG-3'	<u>SEQ ID NO:6</u>	
oIFN- $\tau$	Forward	5'-CATCTTCCCCATGGCCTTCG-3'	<u>SEQ ID NO:7</u>	603
	Reverse	5'-TCATCTCAAAGTGAGTTCAG-3'	<u>SEQ ID NO:8</u>	
oIFN- $\gamma$	Forward	5'-CGATGAAATACACAAAGCTCC-3'	<u>SEQ ID NO:9</u>	504
	Reverse	5'-GATTACATTGATGCTCTCCG-3'	<u>SEQ ID NO:10</u>	
oG3PDH	Forward	5'-ATGGGGAAGGTGAAGGTCGG-3'	<u>SEQ ID NO:11</u>	901
	Reverse	5'-ATGTGGGCCATGAGGTCCAC-3'	<u>SEQ ID NO:12</u>	
	Forward	5'-ATGGGGAAGGTGAAGGTCGG-3'	<u>SEQ ID NO:13</u>	149
	Reverse	5'-ATGTGGGCCATGAGGTCCAC-3'	<u>SEQ ID NO:14</u>	

**Please replace the table on page 87, lines 14-33, of the specification of record with the following revised table, marked-up to show changes made.**

Table III

Name	Sequence of forward and reverse prime	Length (bp)
CXCR3	5'-GCATCAGCTCGATCGGTAC-3' 5'-GATGCGGGCGTAGCAATAGG-3'	<u>SEQ ID NO:5</u> <u>SEQ ID NO:6</u>
XCR1	5'-ATGGAGCCCTCAGACATCCC-3' 5'-GAGGATCTCCACAGTAGCAGA-3'	<u>SEQ ID NO:15</u> <u>SEQ ID NO:16</u>
Integrin $\alpha$ 5	5'-TGCTGTGAACCAGAGTCGTC-3' 5'-ATCCACTGCACAGCTGTGGC-3'	<u>SEQ ID NO:17</u> <u>SEQ ID NO:18</u>
Integrin $\alpha$ V	5'-GAAGCAGGAAAGAGAGCCTG-3' 5'-CTATATCCGTGGCTCCTTTC-3'	<u>SEQ ID NO:19</u> <u>SEQ ID NO:20</u>
Integrin $\beta$ 1	5'-CTCAAATCCAGCCACAGCAG-3' 5'-CCAGCGAAGTGAAACACAGC-3'	<u>SEQ ID NO:21</u> <u>SEQ ID NO:22</u>
Integrin $\beta$ 3	5'-AGATTGGAGACACGGTGAGC-3' 5'-GTACTTGAAAGTGTCTTGC-3'	<u>SEQ ID NO:23</u> <u>SEQ ID NO:24</u>
Integrin $\beta$ 5	5'-GTCTGAAGATTGGGGACAGC-3' 5'-GGTACACGCTCTGGTTCTCC-3'	<u>SEQ ID NO:25</u> <u>SEQ ID NO:26</u>
G3PDH	5'-ATGGGAAAGGTGAAGGTCGG-3' 5'-ATCATATTGGAACATGTAAA-3'	<u>SEQ ID NO:11</u> <u>SEQ ID NO:12</u>

**Please replace the paragraph on page 90, lines 15 to page 91, line 4, of the specification of record with the following revised paragraph, marked-up to show changes made.**

Twenty four-well plates were coated with type I collagen (Nitta gelatin) or fibronectin at a concentration of 10  $\mu$ g/mL at room temperature for 2 hours, or plated with caprine epithelial cells. After washing with PBS three times, the plates were blocked with 1% BSA at room temperature for 30 min. HTS-1 or primary trophoblast cells were labeled with the intracellular fluorescent dye, 4  $\mu$ M calsein-AM (Molecular Probes Inc., Eugene, OR) at 37°C for 30 min. After washing with PBS three times, the cells were incubated with the indicated rclP-10 at 37°C

for 1 hour, and were then added to each well. The plates were incubated at 37°C for 1 hour, and then washed with PBS three times to remove unbound cells. The remaining cells were treated with PBS containing 1% Triton X-100 and 10% ethanol. Fluorescence of cells was measured using fluorescence reader (excitation filter 485 nm and emission filter 535 nm) (ARVO<sup>TM</sup> SX 1420 Multilabel Counter, PerkinElmer Life Sciences Inc., Boston, MA). For the blocking experiments, rclP-10 protein was preincubated with 30 µg/mL of anti-IP-10 antibody or control rabbit IgG (Sigma) at 37°C for 1 hour. To investigate the involvement of IP-10 on cell adhesion to fibronectin, the Gly-Arg-Gly-Asp-Ser-Pro-Lys [SEQ ID NO:30] (GRGDSPK, Sigma) synthetic peptide at a concentration of 50 mM, its control, Arg-Gly-Glu-Ser [SEQ ID NO:31] (RGES, Sigma), or 5 mM EDTA was preincubated with cells and rclP-10 protein. Three independent ~~experiment~~ experiments were performed for each substrate and treatment.